

#### St. 10SEPH TUTE OF TECHNOLOGY

(An Autonomous Institution)





**OMR, CHENNAI - 119** 





TO KNOW MORE ABOUT THE DEPARTMENT ACTIVITIES **PLEASE VISIT** 

https://stjosephstechnology.ac.in/web/eee/

### **MESSAGES**

### Dr. B. Babu Manoharan M.A., M.B.A., Ph.D. Chairman

It gives me immense pleasure to commend the staff and the students of the Department of Electrical and Electronics Engineering for this excellent Newsletter. This Newsletter maps the merits and milestones accomplished by the department. I sincerely hope that the efforts put in by the students and the staffs help them in all their future endeavors.

## Mrs. S. Jessie Priya M.Com. Executive Director

This Newsletter is testament to the academic excellence of the college which in myriad ways is ingrained in our culture. It gives me great pleasure to see the exceptional potential of the students of the Department of Electrical and Electronics Engineering, in various extra-curricular activities as well as in academics. I congratulate the staff and the students on bringing out this wonderful Newsletter.

#### Mr. B. Shashi Sekar M.Sc. Managing Director

I am very happy that our institution has shown a marvelous presentation of the activities through the Newsletter. I congratulate the staff and students for their excellent effort. Today, as we march towards a technological world, we aspire to open new vistas in the field of education for our students and this Newsletter helps us in our efforts.

## Dr. S. Arivazhagan M.E., Ph.D. Principal

I take this opportunity to laud the efforts of all those who were involved in the making of this Newsletter from the Department of Electrical and Electronics Engineering, St. Joseph's Institute of Technology. I would also like to appreciate the relentless efforts of our teachers for giving their best in bringing out the best in each student helping them achieve their goals.

## Dr. G. Sreekumar M.Tech., Ph.D. Dean Academics

It is inspiring to see the Department of Electrical and Electronics Engineering reach new heights through the efforts documented in this Newsletter. This publication not only reflects the department's commitment to academic and technical excellence but also its focus on nurturing well-rounded individuals. Congratulations to everyone who contributed to this outstanding achievement, paving the way for even greater successes ahead.

### **CONTENTS**

Sl. No.	TITLE	PAGE NUMBER
1.	VISION AND MISSION	01
2.	PLACEMENT DETAILS	02
3.	STUDENT ACHIEVMENTS	04
4.	IEEE ACTIVITIES	08
5.	IEI ACTIVITIES	11
6.	GREEN ENERGY CLUB ACTIVITIES	12
7.	GUEST LECTURE	14
8.	INDUSTRIAL VISIT	16
9.	MOCK INTERVIEW	17
10.	EDITORIAL	18

#### Vision

To become a well renowned department in the field of Electrical and Electronics Engineering by imparting quality education and inculcating ethical values among students to serve the global society.

#### Mission

The department strives

M1: To provide strong fundamental knowledge through effective teaching- learning process to make the students competent in the field of Electrical and Electronics Engineering

M2: To enable students with intellectual resources to conduct innovative research in order to meet the challenges faced by the industries and mankind

M3: To promote the skills on emerging technologies through industry-interactions to attain sustained placements and other career opportunities

M4: To inculcate ethically bound professional standards, skills of leadership and management for a successful career.

#### **Program Educational Objectives**

- 1. To provide foundation in their fields such as circuit theory, Field theory, control theory and computational platforms.
- 2. To enhance the designing skills for the evolution of new technology in the Electrical and Electronics domain.
- 3. To equip the students to work in interdisciplinary groups for enhancing professional skills.
- 4. To motivate and prepare the students for a successful career in the industry or higher education.
- 5. To create awareness for lifelong learning and inculcate professional ethics.

#### **Program Specific Outcomes**

- 1. Our graduates will be able to understand the basic concepts related to engineering and technology with enhanced problem solving skills.
- 2. Our graduates, with high proficiency in Electrical and Electronics Engineering will be able to exhibit technical knowledge in industrial and entrepreneurial focus.
- 3. Our graduates can translate the effects of professional values and ethics in accordance with Electrical and Electronics Engineering domain, to create sustained environment for social growth

#### **PLACEMENT DETAILS**

The Department of Electrical and Electronics Engineering congratulates students on their placements! Your dedication and hard work have paid off. We thank the placement teams, mentors, and industry partners for their support. Wishing you success in your careers. Congratulations!

S. No.	NAME OF THE STUDENT	NAME OF THE COMPANIES PLACED
		HEXAWARE TECHNOLOGIES
1.	AISHWARYA P	• INFOSYS
		• COGNIZANT
2.	AMALA GRACEWIN S	NUMAX ENERGY SOLUTION
3.	ARUN A	NUMAX ENERGY SOLUTION
4.	ASWIN N	NUMAX ENERGY SOLUTION
5.	AZIM AHAMED	• MU SIGMA
6.	DHARUN ANAND S	BNP PARI BAS
7.	DHEVIN ANANDA RAJ A S	MAGNETIC AND CONTROLS
8.	DIVAKAR S	NUMAX ENERGY SOLUTION
		MU SIGMA
	GAYATHRI P	• ACCENTURE
9.		<ul> <li>RENAULT NISSAN</li> </ul>
		• LTI-MINDTREE
10.	HARSHA G	• INFOSYS
11.	JEEVA MURUGAN A	• MITSOGIO
11.		LTI-Mindtree
12.	KARTHICK S	• INFOSYS
13.	MUKILAN S	NUMAX ENERGY SOLUTION
14.	MUTHU SELVAM S	MAGNETIC AND CONTROLS
15.	NARMADHA K	• INFOSYS

S. No.	NAME OF THE STUDENT	NAME OF THE COMPANIES PLACED
16.	RAJA VIKARAMA ASWIN K R S	• INFOSYS
17.	RAJKUMAR K	• INFOSYS
18.	SAIVARSHINI R	<ul><li>HEXAWARE TECHNOLOGIES</li><li>ACCENTURE</li></ul>
19.	SENTHIL VELAN R	<ul><li>ACCENTURE</li><li>AVASOFT</li><li>KEYANCE</li></ul>
20.	SUBASH K	NUMAX ENERGY     SOLUTIONS
21.	VIGNESHWAR R M	ACCENTURE
22.	VARSHNI KANNA M	<ul><li>AVASOFT</li><li>HEXAWARE</li></ul>

# STUDENT ACHIEVEMENTS CONFERENCE PUBLICATIONS

We extend our heartfelt congratulations to our students for their remarkable achievements in publishing research papers in a variety of esteemed conferences. This exceptional accomplishment reflects not only your intellectual curiosity and commitment but also your unwavering perseverance and dedication to academic excellence. By sharing your innovative ideas and rigorous research findings, you have contributed significantly to the academic community, pushing the boundaries of knowledge and opening new avenues for exploration. These publications are a testament to your ability to think critically, analyze complex problems, and present solutions that resonate with the broader scientific and technical community. Each paper you publish adds value to the world of research and amplifies the department's vision of nurturing scholarly brilliance.

S. No.	Reg. No	Name	Title of Paper	Conference and Date	Name of the Organizing college
1.	312421105023	Karthick Pragadeesh K	Improvement of Power Quality in a Power System Using the QBC-Shunt Active Filter and FOPID Technique	Power Quality in a Power System Using  3rd International Conference on Electronics and Renewable	St. Mother Theresa Engineering College,
	312421105058	Vishal S K		11-13 February 2025	Tuticorin
2.	312421105010	Deepika S.T	Nine Level Inverter with Dynamic	6th International Conference of Power and Embedded Drive	SSN College Of
	312421105018	Harini M	Voltage Gain and Low Voltage Stress	Voltage Gain and Control,	Engineering, Kalavakkam
3.	312421105033	Narmadha K	Solar Photovoltic Based Model Predictive Controlled	6th International Conference of Power and Embedded Drive	SSN College Of
	312421105046	Sariha R	Fed Induction Motor Drive System for Water Pumping Applications	Control, 27-28 February, 2025	Engineering, Kalavakkam

4.	312421105057	Vigneshwar R M	Enerlink: Empowering EVs With Dynamic Vehicle-To-Vehicle	2nd International Conference on Futuristic Trends in Science, Engineering and Management,	St. Xavier's  College of  Management & Technology,
	312421105017	Hariharan J K	Charging	27-28 February 2025	Patna
	312421105029	Mukesh S			
5.	312421105054	SubashPrabah aran R	Text To Braille Converting Communication Device	3rd International Conference on Recent and Advanced Composite Material, 26-28 February 2025	SRM Institute of Science and Technology, Chennai
6.	312421105040	Ritvik B C	IoT – Enabled remote Pre-Conditioning and Predictive Thermal	3rd International Conference on Electronics and Renewable	St. Mother Theresa Engineering
0.	312421105024	Logesh K	Management System for Electric Vechiles in extreme climates	Systems, 11-13 February 2025	College, Tuticorin
7.	312421105050	Sneka K	Secure Energy Management Smart Metering Model	2nd International Conference on Futuristic Trends in Science, Engineering and Management, 27-28 February 2025	St. Xavier's College of Management & Technology, Patna
	312421105045	Santhiya R	System		
	312421105007	Bavasrivathani B			Ct V - '
8.	312421105009	Danasiri P A	Enhanced Electric Vehicle Management System: Safety and Monitoring	2nd International Conference on Futuristic Trends in Science, Engineering and Management, 27-28 February 2025	St. Xavier's College of Management & Technology, Patna
9.	312421105031	Muthu Selvam S	Optimized LSTM model for day-	2nd International Conference on Futuristic Trends in Science,	St. Xavier's College of
	312421105012	Dhevin Ananda Raj A S	ahead solar power prediction	Engineering and Management, 27-28 February 2025	Management & Technology, Patna
10.	312421105014	Divakar S	Automated Mining Equipment Monitoring:	3rd International Conference on	St. Mother Theresa
	312421105011	DharunAnand S	Enhancing Efficiency through Sensor Technology and Predictive Maintenance	Electronics and Renewable Systems, 11-13 February 2025	Engineering College, Tuticorin

11.	312421105004	Arun A	IOT-Enabled Smart Wheelchair with Environmental	3rd International Conference on Electronics and Renewable Systems, 11-13 February 2025	St. Mother Theresa
	312421105005	Aswin N	Sensing and Geofencing for Safe and Comfortable Navigation		Engineering College, Tuticorin



















#### **IEEE ACTIVITY- WEBINAR**

Our Department successfully organized an IEEE Guest Lecture on 31<sup>st</sup> January 2025 for the students of II Year EEE based on Multilevel Inverter Topology by Dr. Sanjiv Kumar, Professor, Electrical Engineering Department, Harcourt Butler Technical University Kanpur. The session aimed to provide students and faculty with in-depth knowledge of multilevel inverters, their working principles, and practical applications. Dr. Sanjiv Kumar discussed different topologies, including diode-clamped, flying capacitor, and cascaded H-bridge inverters, highlighting their role in renewable energy systems, electric vehicles, and industrial applications.

The lecture also covered challenges such as switching losses and complexity, along with future research trends in the field. The interactive session allowed participants to engage with the speaker and clarify their doubts. The event concluded with a vote of thanks, appreciating Dr. Sanjiv Kumar's insights and the efforts of the IEEE Student Branch. Attendees found the session highly informative and expressed interest in more such technical lectures, making it a valuable learning experience for aspiring engineers and researchers.



#### **IEEE ACTIVITY- SEMINAR**

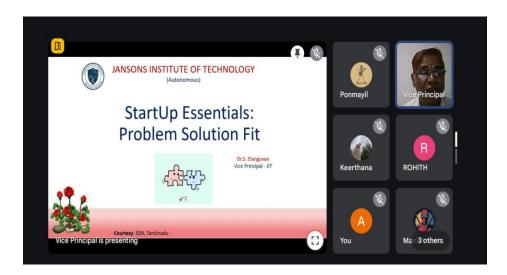
Our Department successfully organized a student-led seminar on Sustainable Development Goals (SDGs) on February 14, 2025 to II Year EEE students. The event aimed to create awareness about the 17 SDGs set by the United Nations and their significance in building a sustainable future. Students delivered insightful presentations on key topics such as poverty eradication, quality education, climate action, and responsible consumption, highlighting real-world challenges and innovative solutions. The interactive session encouraged discussions, with participants proposing practical initiatives that could be implemented at the institutional level. The event concluded with a vote of thanks, appreciating the efforts of the organizing team and the active participation of attendees. Overall, the seminar served as an informative and inspiring platform, motivating students to contribute toward sustainable development and responsible global citizenship.





#### **IEEE ACTIVITY- WEBINAR**

Our Department successfully hosted an IEEE Expert Talk on "Startup Essentials: Problem-Solution Fit", providing valuable insights into entrepreneurship. The session was delivered by Dr. Elangovan Sankaranarayanan, Professor & Head of AI & DS at Jansons Institute of Technology for our II Year students on 27th February 2025, from 10:00 AM to 11:00 AM, the event equipped students with essential knowledge on identifying real-world problems and developing viable solutions—key aspects of building a successful startup. Dr. Elangovan shared expert guidance on navigating the entrepreneurial journey, offering students practical strategies to turn their ideas into sustainable businesses. This session was highly beneficial, inspiring students to explore innovative solutions and enhance their entrepreneurial mindset.





#### **IEI ACTIVITY - QUIZERIA**

On February 6, 2025 our department successfully conducted an IEI event for II Year students on Renewable Energy Quiz aimed at enhancing students' knowledge of sustainable energy sources. Organized by the Institution of Engineers (India) student chapter, the quiz focused on topics such as solar energy, wind power, hydroelectricity, and emerging green technologies. The event witnessed enthusiastic participation, with students showcasing their understanding and quick problem-solving skills.

The quiz was structured in multiple rounds, testing the depth of knowledge and awareness of renewable energy advancements. The competition created an engaging and intellectually stimulating environment, encouraging students to explore sustainable solutions. The event concluded with the announcement of winners and a vote of thanks, appreciating the efforts of organizers, faculty coordinators, and participants. Overall, the Renewable Energy Quiz was a highly informative and inspiring event, reinforcing the importance of clean energy and sustainability in modern society..





#### **GREEN ENERGY CLUB**

On 6th February 2025, II Year students of Department of EEE conducted an engaging event for their junior department students under the Green Energy Club "SUSTAINA". The event featured two main activities designed to promote teamwork, critical thinking, and environmental awareness. The first activity, a Sudoku challenge, tested students' problem-solving abilities while encouraging logical thinking. Participants worked individually or in teams to solve puzzles within a time limit. The second activity, "Find the Log," aimed to raise awareness about environmental conservation. Students participated in a scavenger hunt-style game to locate hidden items symbolizing natural resources, highlighting the importance of sustainability. The event fostered collaboration between senior and junior students, promoting both intellectual growth and environmental consciousness. Overall, the event was a success, providing an enjoyable and educational experience that strengthened teamwork and reinforced the importance of green energy and sustainable practices.





#### **GREEN ENERGY CLUB**

On 22nd February 2025, the Green Energy Club "SUSTAINA" organized by the Department of Electrical and Electronics Engineering students, conducted an engaging event for II Year students. The event featured a Sudoku challenge, "Find the Logo," and "Find the Word" games. The Sudoku challenge tested participants' logical thinking and problem-solving skills, while "Find the Logo" focused on identifying logos related to green energy and environmental organizations, raising awareness about sustainability. In the "Find the Word" game, participants worked in teams to unscramble letters and form environmental terms, reinforcing knowledge of green energy concepts. The event successfully promoted teamwork, enhanced cognitive abilities, and fostered a deeper understanding of sustainability among the students. It was an enjoyable and educational experience that strengthened both intellectual skills and environmental consciousness.







#### **GUEST LECTURE**

Our Department organized an informative Guest Lecture on 26<sup>th</sup> February 2025 for II Year students in topic of "Application of Machine Learning in Electrical Engineering," delivered by Mr. Sriram S, Data Scientist, Blackstraw Simplify AI. The lecture focused on the growing role of machine learning (ML) in electrical engineering, exploring its practical applications like power system optimization, fault detection, energy management, and predictive maintenance. Mr. Sriram discussed how ML algorithms are integrated into smart grids, renewable energy systems, and automation, emphasizing their potential to enhance efficiency and sustainability. The session provided students with a deeper understanding of how data analysis and pattern recognition improve the performance of electrical systems. It encouraged students to explore the intersection of artificial intelligence and electrical engineering and understand the future innovations in the field. Overall, the guest lecture was an enriching experience that broadened students' perspectives on the role of machine learning in shaping the future of electrical engineering.





#### **GUEST LECTURE**

Guest Lecture on "Energy Audit and Conservation of Energy" The Department of Electrical and Electronics Engineering at St. Joseph's Institute of Technology organized a guest lecture on "Energy Audit and Conservation of Energy" on 28th February 2025 for II Year EEE students. The session was conducted by Mr. M. Thavachelvan, Managing Director of Inovonz Engineering Pvt. Ltd., who is leading 200+ projects across 17 Indian states and 5 countries in Instrumentation, Electrification, and Automation (IEA).

During the lecture, Mr. M Thavachelvan explained the importance of energy audits, various conservation techniques, and strategies to improve energy efficiency in industries and households. He shared real-world case studies from his vast experience, giving students practical insights into the field. The session was highly interactive and beneficial, enhancing students' understanding of sustainable energy management. The department expressed gratitude to Mr. Thavachelvan for delivering such an informative lecture, which inspired students to explore innovative solutions for energy conservation.





#### **INDUSTRIAL VISIT**

On 24<sup>th</sup> February 2025, the II Year Electrical and Electronics Engineering students of St. Joseph's Institute of Technology visited North Chennai Thermal Power Station for an industrial visit. The visit aimed to provide practical exposure to power generation processes and enhance their understanding of thermal power plants. Students were given insights into the working of boilers, which convert water into steam to drive turbines, playing a crucial role in power generation. They also learned about the different types of motors used in the plant and their significance in ensuring efficient energy conversion. Engineers at the plant explained the operational processes in detail, helping students connect theoretical concepts with real-world applications. The visit was highly informative and provided valuable industry exposure, enabling students to gain a deeper understanding of thermal power generation and its role in the electrical engineering field..





#### **MOCK INTERVIEW**

Our Department conducted a mock interview session for II Year EEE students on 8th February 2025 to prepare students for real-world recruitment processes. The session was led by esteemed alumni, including Monica (Digital Specialist Engineer, Infosys), Sriram (Data Scientist, Blackstraw AI), Pooja Natarajan (Quality Service Associate, Amazon), Rahul Kumar (Senior Researcher, SRM), and Sharumathi (Senior Technical Analyst - Cybersecurity, Hexaware). The panelists assessed students on technical knowledge, problem-solving skills, communication, and overall presentation. Monica focused on digital technologies, Sriram evaluated data science concepts, Pooja assessed analytical and quality assurance skills, Rahul Kumar provided insights into research methodologies, and Sharumathi tested cybersecurity knowledge. The session gave students valuable industry insights, boosting their confidence and helping them refine their interview skills. Detailed feedback was provided to guide students on improvement areas. Overall, the mock interview was a highly beneficial and enriching experience, bridging the gap between academic learning and industry expectations..







#### **EDITORIAL**

#### **STAFFS**

- 1. Dr. D. Kirubakaran
- 2. Dr. S. Hemalatha
- 3. Dr. P. Anbarasan
- 4. Mr. R. Manivannan
- 5. Mr. I. Cephas
- 6. Mr. S. Karthick
- 7. Dr. P. Nisha

#### **II YEAR STUDENTS**

- 1. Akshiyapriyadharshini S S
- 2. Anjali Varshika V S
- 3. Aravind R
- 4. Divesh K
- 5. Harinee M

#### STAY CONNECTED WITH US THROUGH OUR WEBSITES



https://www.linkedin.com/in/st-joseph-s-institute-of-technology-electrical-and-electronics-engineering -755108282



https://www.facebook.com/share/3mu5cTiHU3zRYecX/



https://youtube.com/@st.josephsinstituteoft echneee?si=zN38e-9nLKAd-3g



https://www.instagram.com/eee sjit?igsh=cm5ycWc2bW9jNmoy

# Learn more on our department's website:

https://stjosephstechnology.ac.in/web/eee/



#### We Make You Shine

#### St. JOSEPH'S INSTITUTE OF TECHNOLOGY

(An Autonomous Institution)

St. JOSEPH'S GROUP OF INSTITUTIONS

OMR, CHENNAI - 119



## DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING Batch Toppers

Upto Sem VII (Batch 2021 - 2025)



AISHWARYA P 312421105001 9.55



GAYATHRI P 312421105016 9.18



DINESH M M 312421105013 9.06

#### Upto Sem V (Batch 2022 - 2026)



AKASH K 312422105004 9.01



KARPPAKAMALAR S 312422105024 8.96



SHARON JULIET P F 312422105047 8.94

#### Upto Sem III (Batch 2023 - 2027)



NIKITHAA KUMAR 312423105046 9.18



YASIRA BEGUM K 312423105060 8.90



BHUVANESHWARI M 312423105010 8.85









#### **Department of EEE**



#### **About College**

- ✓ St. Joseph's Institute of Technology is a higher education institution in OMR, Chennai, India, established in the year 2011 and offers 7 UG programmes CSE, ECE, EEE, IT and MECH and 1 PG Programme Business Administration.
- ✓ St. Joseph's Institute of Technology is in its 13th year of educational service, in 2024.
- ✓ Anna University has granted Permanent Affiliation for 4 UG Programmes CSE, ECE, IT and MECH from the year 2020-21.
- Anna University has approved 4 Departments CSE, ECE, IT and MECH as Recognized Centre for Research for offering Ph. D/MS (by research).
- ✓ Five courses offered since inception namely B.E. CSE, ECE, EEE, Mech. Engg. & B. Tech. IT have been accredited by NBA in 2017 in a shortest span of 6 years since its establishment, which ascertains the quality of our education.
- ✓ Our College was granted Autonomous status from the year 2022-23 for a period of 10 years.
- Our college has been approved for establishment AICTE Idea Lab one among 95 Labs in India with an investment of Rs. 1.10 Crore to impart skill based training of our students from First Year onwards.
- Our college secured an All India Rank 134 (by AICTE Internshala) among 2000+ colleges participating in student internships for the year 2023 and 48th Rank out of 249+ colleges participated in South Zone.
- ✓ Our graduate outcomes include 80 % of placements in each academic year and 15 % admission to higher studies.
- ✓ For 5 consecutive years, our institution has been awarded with 4 out of 5 stars by the Institutions Innovation Council (IIC), Ministry of Education, Government of India.
- ✓ We are recognized as the "Best Exam Preparatory Centre" for conducting Linguaskill examinations by Cambridge Assessment English.
- ✓ We are consistently awarded "Best Employability Award" every year from 2020 by Aspiring Minds.
- Our institution is approved as a "Skill Development Center" with grant of Rs. 24 Lakhs for establishing Skill Hub under the Pradhan MantriKaushalVikasYojana (PMKVY 4.0)
- ✓ St.Joseph's Institute of Technology is a recognizedRemote center for conducting training programs by IIT Bombay and Nodal center of ISRO-IITs outreach programs to conduct live and interactive courses.
- Ours is a recognized Remote center for conducting training programs by IIT Bombay and Nodal center of ISRO-IITs outreach
  programs to conduct live and interactive courses.
- Our institution is selected under National level "UnnatBharathAbyanProgramme" by MoE Government of India and Skill & Personality Development Program center (SPDP) for SC/ST students by AICTE.
- ✓ We Received a total grant of Rs.21 Lakhs under MSME Idea Hackathon 3.0 (Women) sanctioned by the Ministry of Micro, Small & Medium Enterprises, Government of India.
- Our institution is a recipient of distinguished awards and recognitions namely Innovative Project Award and Youth Conclave Award from INAE, Hackathon Award, IEEE and Premier Institution Award from the Institution of Engineers (India).

